

OPTIC SWITCHING MECHANISM

ABSTRACT OF THE DISCLOSURE

[0056] Techniques for switching an optical element from one path to another, where each path has high dimensional stability in a harsh thermal and dynamic environment, are disclosed. In one particular embodiment, the optic is mounted on a rotatable platform. A spring mechanism preloads the platform against a hard stop, thereby providing accurate and repeatable placement of the optic in its deployed position. The motor's actuator arm is the only element whose position is sensed, allowing the switching system to work without requiring highly precise position feedback. In the stowed position, the spring mechanism operates as a firm tension cable, thereby securing the optic out of the laser beam path.